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PATENT CLAIMS

 A borosilicate glass of high chemicals resistance, characterized by a composition (in % by weight, based
 on oxide) of:

	${ t SiO_2}$	70 - 77
	B ₂ O ₃	6 - < 11.5
	Al ₂ O ₃	4 - 8.5
10	Li ₂ O	0 - 2
	Na ₂ O	4 - 9.5
	K ₂ O	0 - 5
	with $Li_2O + Na_2O + K_2O$	5 - 11
	MgO	0 - 2
15	CaO	0 ~- 2.5
	with MgO + CaO	. 0 - 3
	ZrO ₂	0 - < 0.5
	CeO ₂	0 - 1

- 20 and, if appropriate, standard refining agents in standard amounts.
 - 2. The borosilicate glass as claimed in claim 1, characterized by a composition (in % by weight, based on oxide) of:

	1-
SiO ₂	70.5 - 76.5
B ₂ O ₃	6.5 - < 11.5
Al ₂ O ₃	4 - 8
Li ₂ O	0 - 1.5
Na ₂ O	4.5 - 9
K ₂ O	0 - 5
with $Li_2O + Na_2O + K_2O$	5.5 - 10.5
MgO	0 - 1
CaO	0 - 2
with MgO + CaO	0 - 3
ZrO ₂	0 - < 0.5
CeO ₂	0 - 1
	B_2O_3 Al_2O_3 Li_2O Na_2O K_2O with $Li_2O + Na_2O + K_2O$ MgO CaO with $MgO + CaO$

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and, if appropriate, standard refining agents in standard amounts.

3. The borosilicate glass as claimed in claim 1 or 2, characterized in that it additionally contains (in % by weight, based on oxide):

SrO 0 - 1.5 BaO 0 - 1.5 10 with SrO + BaO 0 - 2 ZnO 0 - 1.

4. The borosilicate glass as claimed in at least one of claims 1 to 3, characterized in that it additionally contains (in % by weight, based on oxide):

 $Fe_2O_3 + Cr_2O_3 + CoO$ 0 - 1 TiO_2 0 - 3.

- 20 5. The borosilicate glass as claimed in at least one of claims 1 to 4, characterized in that, apart from inevitable impurities, it is free of As_2O_3 and Sb_2O_3 .
- 6. The borosilicate glass as claimed in at least one of claims 1 to 5, having a coefficient of thermal expansion $\alpha_{20/300}$ of between > 5 and 6.0 \times $10^{-6}/K$, in particular between > 5.3 and 5.9 \times $10^{-6}/K$, and a working point V_A of at most 1180°C.
- 30 7. The use of the borosilicate glass as claimed in at least one of claims 1 to 6, as sealing glass for Fe-Co-Ni alloys.
- 8. The use of the borosilicate glass as claimed in at least one of claims 1 to 6 as instrument glass for laboratory applications and for the construction of chemical installations.

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9. The use of the borosilicate glass as claimed in at least one of claims 1 to 6 as primary packaging material for pharmaceuticals, for example as ampoule glass.